

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

In re Tecfidera Antitrust Litigation

This document applies to All Actions

Case No. 1:24-cv-07387

Hon. April M. Perry
Hon. Young B. Kim

**JOINT PROTOCOL FOR THE DISCOVERY OF
ELECTRONICALLY STORED INFORMATION AND HARD COPY DOCUMENTS**

The Parties in the above-captioned consolidated litigation (the “Action” or this “Litigation”), through their counsel, have stipulated and agreed to give effect to this Joint Stipulated Protocol for Discovery of Electronically Stored Information and Hard Copy Documents (“ESI Protocol”), to facilitate discovery in this action. Local No. 1 Health Fund, Mayor and City Council of Baltimore, Teamsters Local 237 Welfare Fund and Teamsters Local 237 Retirees’ Benefit Fund, New York State Teamsters Council Health and Hospital Fund, and UFCW Local 1500 Welfare Fund, and Jacksonville Police Officers and Fire Fighters Health Insurance Trust (together, “Plaintiffs”) and Biogen Inc. (“Biogen” or Defendant”) (collectively, the “Parties”)

I. SCOPE.

A. General.

1. The procedures and protocols set forth in this Protocol shall govern the production of ESI and hard copy documents in this matter, unless the Parties agree in writing to change them or they are changed by the Court. This ESI Protocol is intended to aid the Parties by providing a more predictable, cost-effective, and efficient management structure for the maintenance and

production of electronic discovery. Nothing in this ESI Protocol shall supersede the Parties' obligations under the Federal Rules of Civil Procedure, the Local Civil Rules for the U.S. District Court for the Northern District of Illinois ("Local Rules"), and any other applicable orders and rules.

2. Nothing in this ESI Protocol shall be construed to affect the admissibility of discoverable information. By stipulating to this ESI Protocol and agreeing to produce ESI or hard copy documents, generally or in a particular form or forms, no Party waives any objections to producing any particular document or category of documents, unless otherwise agreed upon in writing. All Parties preserve all such grounds for objections, including the right to assert all applicable privileges and protections, and all Parties reserve the right to object to any such asserted privileges and protections. Furthermore, the Parties' stipulation to this ESI Protocol shall not constitute a waiver of (a) any jurisdictional defenses that may be available; (b) any affirmative defenses under Rule 8 of the Federal Rules of Civil Procedure, any defense listed in Rule 12(b) of the Federal Rules of Civil Procedure, or otherwise (including but not limited to any defense based on improper service), or (c) any other statutory or common law defenses, claims, or objections that may be available to any Party. Each Party expressly reserves all rights to raise these and any other defenses, claims, or objections available to it.

3. All productions in this litigation are subject to the Protective Order separately entered by the Court in this Litigation, and nothing in this ESI Protocol shall restrict any Party's right to seek modification of or relief from that Protective Order.

B. Disputes.

1. The Parties shall make good-faith efforts to comply with and resolve any differences concerning compliance with this ESI Protocol. If a Producing Party, notwithstanding

its good-faith efforts, anticipates that it cannot comply with any material aspect of this ESI Protocol or if compliance with such material aspect would be impossible or unduly burdensome, that Producing Party shall promptly inform the Requesting Party in writing and within a reasonable time before the date of production explaining in detail why compliance with the ESI Protocol is impossible or unduly burdensome and proposing a reasonable alternative. The parties shall meet and confer promptly after such notice to attempt to resolve any dispute before seeking further Court relief.

2. The Parties shall meet and confer in good faith on any issue regarding ESI, as necessary, including any issues relating to custodians, data sources and search methodologies (*e.g.*, search terms and other methods of identifying responsive ESI), that arise under this ESI Protocol or otherwise. In the event the Parties cannot reach an agreement on a disputed matter, the Parties shall submit the matter to the Court.

3. No Party may seek relief from the Court concerning compliance with the ESI Protocol unless it has conferred in good faith with the affected Parties to attempt to resolve or narrow the dispute. If the dispute cannot be resolved after the meet and confer within a reasonable time period after initiating the meet and confer process, or if any Party refuses to participate in bad faith, the moving party reserves the right to seek relief from the Court.

II. DEFINITIONS.

A. “**Documents**” shall have the same definition as set forth in Local Rule 26.5(c) and Federal Rules of Civil Procedure 26 and 34(a).

B. “**Document Family**” refers to a group of related documents that includes parent and child documents (*e.g.*, a parent email and subsequent emails, and any attachments thereto,

including, but not limited to, Excel spreadsheets, Word documents, PowerPoint presentations, or PDFs).

C. **“Electronically stored information”** or **“ESI,”** as used herein and as referenced in the Federal Rules, means and refers to any information or data that is originally or subsequently stored electronically, including in or on any storage media located on computers, file servers, disks, tape, USB drives, or other real or virtualized devices or media, and regardless of whether it is in the original format in which it was created or converted from another format, as opposed to stored in hard copy (i.e., on paper).

D. **“Extracted Text”** means the text extracted from an electronic document, and includes all header, footer, redlines, comments, notes, and document body information when reasonably available.

E. **“Hard Copy Document”** means a document collected from physical files (paper) and not from electronic sources.

F. **“Load/Unitization file”** means an electronic file containing information identifying a set of paper-scanned images or processed ESI and indicating where individual pages or files belong together as documents, including attachments, and where each document begins and ends. A Load/Unitization file will also contain data relevant to the individual Documents, including extracted and user- created Metadata.

G. **“Media”** means an object or device, real or virtual, including, but not limited to, a disc, tape, computer or other device, on which data is or was stored.

H. **“Metadata”** means and refers to the structural information of a file that contains data about the file, as opposed to describing the content of a file, and includes, without limitation: (i) information embedded in or associated with a native file that is not ordinarily viewable or

printable from the application that generated, edited, or modified such native file; and/or (ii) information generated automatically by the operation of a computer or other information technology system when a native file is created, modified, transmitted, deleted or otherwise manipulated by a user of such system.

I. **“Native,” “Native Format,” or “Native Data Format”** means and refers to the format of ESI in the application in which it was originally created and/or as used by the Producing Party in the usual course of its business and in its regularly conducted activities.

J. **“OCR text”** means text generated through Optical Character Recognition Process of image/bitmap picture representation of the documents.

K. **“Parties”** means or refers collectively to the named plaintiffs and defendants in the above-captioned matter, as well as any later added plaintiffs and defendants. “Party” shall refer to a plaintiff or defendant, individually.

L. **“Producing Party”** means or refers to any Party in the litigation from which production of ESI or Hard Copy Documents are sought.

M. **“Requesting Party”** means or refers to any Party in the litigation seeking production of ESI or Hard Copy Documents.

N. **“Static Image(s)”** means a representation of ESI produced by converting a Native File into a standard image format capable of being viewed and printed on standard computer systems. A Tagged Image File Format, or “TIFF,” image is an example of a Static Image. “Tagged Image File Format” or “TIFF” refers to the CCITT Group IV graphic file format for storing bit-mapped images of ESI or paper documents. A Portable Document Format, or “PDF” image is another example of a Static Image.

O. **“Structured Data”** means data that resides in a defined or identifiable field within a record or file, or data stored in a structured format, such as databases, spreadsheets, CSV, files, logs or other data sets, according to specific form and content rules.

III. PRESERVATION.

A. Deleted Files and Litigation Holds.

1. If a Producing Party learns that ESI responsive to a Requesting Party’s Requests for Production of Documents served pursuant to Federal Rule of Civil Procedure 34 that existed as of the date upon which the duty to preserve ESI arose (1) was lost, destroyed, or is no longer retrievable, and (2) cannot be restored or replaced through additional discovery, the Producing Party shall so advise the Requesting Party, at which point the Requesting Party and Producing Party shall meet and confer regarding the issue.

2. Nothing in this agreement alters the Producing Party’s obligations pursuant to Federal Rule of Civil Procedure 26(b)(2)(B).

B. Types of ESI that Need Not Be Preserved or Searched.

1. The Parties agree that there is no need to preserve or collect ESI from the following sources, which are deemed to not likely contain relevant information and to be not reasonably accessible:

- 1.1 random access memory (RAM), temporary files, or other ephemeral data;
- 1.2 on-line access data such as temporary internet files, histories, caches, cookies, etc.;
- 1.3 data in Metadata fields that are frequently updated automatically, such as last-opened dates;

1.4 damaged, residual, “deleted,” “slack,” “fragmented,” “unallocated,” or other data accessible only by use of computer forensics;

1.5 data stored on photocopiers, scanners, and/or fax machines;

1.6 data maintained in any electronic backup system for the purpose of system recovery or information restoration, including but not limited to, system recovery backup tapes or other media, continuity of operations systems, and data or system mirrors or shadows, provided that such data are more accessible elsewhere;

1.7 operating system files, executable files;

1.8 structural files not material to individual file contents that do not contain substantive content (e.g., .CSS, .XSL, .DTD, etc.); and

1.9 non-substantive embedded files (e.g., company logos or signature blocks), where they are displayed in the parent document.

C. Inaccessible Documents

1. The Parties agree that there is no need, at this time, to search ESI from any source a Party has identified to the Requesting Party as not reasonably accessible pursuant to Federal Rule 26(b)(2)(B), although the Parties must take reasonable steps to preserve such ESI if potentially responsive. A decision to preserve any ESI shall not be interpreted as an agreement that the preserved material is relevant to the issues in the case or constitutes reasonably accessible ESI that could be subject to review and production. However, a Party may seek relief from the Court to require a search of any such source for good cause shown. The Parties further agree that there is no need to modify or suspend the procedures used by them in the ordinary course of business to backup data and systems for disaster recovery and similar purposes related to continuity of operations.

IV. SEARCH PROCEDURES FOR ELECTRONIC DOCUMENTS.

1. The Parties shall identify potentially responsive ESI by: identifying and selecting custodians and sources most likely to possess responsive documents; and (a) applying agreed-upon search terms to identifiable data repositories and custodian data sources in accordance with the provisions of Section IV.B, (b) identifying documents or ESI that are responsive to the Requesting Party's discovery requests through direct review, where the Parties agree that search terms are not necessary to locate such documents or ESI, and/or (c) utilizing Technology Assisted Review as described below in Section C; provided, however, that the Producing Party shall produce the TAR methodology. Before deploying TAR used for the purpose of producing documents, the Parties shall meet and confer in good faith regarding reasonable disclosure of the proposed methodology, procedures, or technology to be used.

2. Each Producing Party may, at its election, review ESI that contains any agreed-upon search terms for responsiveness and privilege prior to production to the Requesting Party.

3. Each Party shall be primarily responsible for identifying custodians and custodial data sources likely to contain responsive documents; however, the Parties agree to confer as to custodian lists.

4. The fact that a document may have been retrieved by application of search terms or TAR shall not prevent any Party from withholding from production such document for lack of responsiveness or privilege. Conversely, the absence of a search term hit or TAR retrieval for a given document does not automatically render it non-responsive. To the extent any Party identifies responsive ESI or documents not hit upon by search term filters or retrieved by application of TAR, all such non-privileged documents must be produced, subject to the Parties' objections to discovery requests. Further, if any document within a Document Family is retrieved by application

of search terms or TAR and determined to be responsive, the entire family of documents must be produced, absent a privilege objection or other objection permitted under this ESI protocol or by any applicable rule or order.

5. The Parties shall abide by the following process, which may be modified upon agreement of the Parties.

5.1 As part of the meet and confer process following the service and receipt of Requests for Production of Documents pursuant to Federal Rule of Civil Procedure 34, a Producing Party shall provide to the Receiving Party an initial list of (a) custodians within its organization likely to possess responsive ESI, along with each custodian's job title and a brief summary of the custodian's primary responsibilities; if a Producing Party intends to use search terms, (b) proposed keyword search terms and strings (including semantic synonyms, code words, acronyms, abbreviations, non-language alphanumeric associational references to relevant ESI, etc.) to be used when searching for ESI; (c) a list of non-custodial data sources (such as databases, servers, group shares, cloud-based storage, etc.) that may contain responsive information; and (d) any proposed date restriction criteria related to ESI searches; and (e) for any source of data that it reasonably expects would contain responsive ESI, a specific delineation for each as to how it intends to search for responsive ESI, whether by search terms, TAR, and/or linear review.

6. The Parties will continue to meet and confer regarding any search process as necessary and appropriate during discovery. Nothing in this Paragraph, or the subsequent designation of any search process, shall operate to limit a Party's obligations under the Federal Rules of Civil Procedure and applicable decisional authority to conduct a reasonable search for responsive Documents. If the Producing Party knows of responsive Documents that the search process failed to capture, the Producing Party shall promptly take all reasonable steps to collect

and produce such Documents, subject to the Parties' objections to discovery requests. This ESI protocol does not address or resolve any other objection to the scope of the Parties' respective discovery requests, and it does not prevent any Party from undertaking searches of its own ESI for any purpose at any time.

B. Use of Search Terms.

1. If a Producing Party elects to use search terms to identify potentially responsive documents and ESI, it shall identify and propose to the Requesting Party an initial list of search terms, custodians, custodial data sources, and non-custodial data sources that are likely to contain responsive documents and ESI, and the Parties will meet and confer regarding those terms and any additional terms, or other requested changes, proposed by the Requesting Party. That meet and confer shall include, when requested, an exchange of information that includes, where relevant, semantic synonyms, code words, acronyms, abbreviations, nonlanguage alphanumeric associational references to relevant ESI, and any other information agreed to by the Parties.

1.1 The Parties agree that they will cooperate in good faith regarding the formulation of appropriate search terms and strings and methods to be used to cull potentially responsive ESI. The Parties may agree to meet and confer regarding potential modification of the search queries or the search methodologies during the course of the search query negotiation process if the search queries or the results of search methodologies appear under-inclusive or over-inclusive. Where the Producing Party believes that a search term proposed by the Receiving Party is overinclusive, the Producing Party may provide the Requesting Party with the initial hit count of the Search Term and the hit count of any revisions to the Search Term proposed by the Parties. If the Parties reach an impasse, they may submit the dispute to the Court.

C. Use of Technology Assisted Review.

1. Parties may leverage technology workflows, including email threading, predictive coding, and technology assisted review (collectively, “TAR”) to assist them in handling ESI, provided that any Party that opts to use such methods discloses that intent and endeavors to be reasonably transparent regarding the universe of documents subject to targeted collections or culling.

1.1 **Email Threading.** Email threading for production is not permitted without leave of Court. The Producing Party may seek leave from the Court to use email threading, pursuant to ECF No. 104. Prior to seeking leave from the Court, the Parties must meet and confer in an attempt to reach agreement on, or narrow disputes concerning, the Producing Party’s requested use of email threading.

2. Specifically, if a Producing Party elects to use TAR for purposes of culling ESI potentially responsive to a Requesting Party’s request, it must first notify the Requesting Party, and the parties shall meet and confer regarding reasonable disclosure of the Producing Party’s TAR application. If the Parties reach an impasse as to the application of TAR, they may submit the dispute to the Court. The fact that a document may have been retrieved by application of TAR does not render it automatically responsive and producible, and a Producing Party may withhold from production such document if non-responsive and/or permissible under the Federal Rules after conducting a good faith responsiveness review in a way consistent with Rule 26(g). The use of TAR shall not be mutually exclusive with the culling of documents utilizing search terms or other search parameters—i.e., the Parties shall be permitted to layer the use of search terms and TAR.

D. Supplementation of Searches for ESI.

1. Upon reviewing documents actually produced in the litigation, and conducting other investigation and discovery, and upon a reasonable good faith belief that there is a deficiency in documents produced in response to the Requesting Party's request, a Requesting Party may request that the Producing Party employ additional search terms and/or collect files from additional custodians. The Parties agree to meet and confer in good faith concerning any such requests promptly and within fourteen (14) days after receiving a written request, or in another time agreed to by the Parties. Thereafter, the Parties may seek judicial intervention if the challenge cannot be resolved.

E. Deduplication.

1. To reduce the unnecessary costs of reviewing and producing exact duplicate documents, each Party must use reasonable, good-faith efforts to avoid the production of duplicate ESI through the use of global deduplication. Global deduplication is to be executed at the document family level. Stand-alone files will deduplicate against other stand-alone files, but not against attachments contained in document families. Deduplication shall be done on exact duplicate documents based on MD5 or SHA-1 hash values. Exact duplicate shall mean bit-for-bit identity of the document content.

2. No Party shall eliminate duplicates of hard-copy documents or ESI by manual review or some method other than by use of the technical comparison using MD5 or SHA-1 hash values outlined above.

3. For exact duplicate documents, the Producing Party will produce the Metadata described in Section V for the single production copy, as well as any such Metadata that differs

for the duplicate document(s). The Producing Party may either de-duplicate documents within custodians, or across custodians, provided they comply with the following:

3.1 If the Producing Party is de-duplicating across custodians, the Producing Party shall populate a field of data that identifies each custodian who had a copy of the produced document (the “duplicate custodian field”) in addition to a separate field of data identifying the custodian whose document is produced.

3.2 If the Producing Party is de-duplicating within custodians only, there is no need to create or provide the duplicate custodian field.

4. If, during the course of its review, the Producing Party identifies a large number of duplicate documents, the Parties can confer regarding a custom deduplication protocol. Except for the removal of extracted logos, no custom deduplication method other than those discussed herein will be implemented without the consent of the Requesting Party, and such consent shall not be unreasonably withheld.

V. GENERAL PRODUCTION FORMAT

A. Production of Hard Copy Documents.

1. All Hard Copy Documents will be produced as black-and-white or full color (as applicable), single-page, Group IV, 300 DPI TIFF images with an .opt image cross-reference file and a delimited database load file (i.e., .dat). In scanning Hard Copy Documents, distinct documents should not be merged into a single record, and single documents should not be split into multiple records (i.e., paper documents should be logically unitized). Document pages which have affixed notes, such as Post-It notes, shall be imaged with and without the note attached in a manner that clearly associates both images with the same Document. Multi-page OCR text for each document should also be provided to the extent such OCR text can be provided or applied in

an automated fashion. Each party shall make a good faith attempt to maximize the text quality of the production through use of settings in the OCR software available to that Party (or Party's vendor), including using reasonable resolution setting and clean originals whenever possible.

B. Production of Native Format ESI.

1. Spreadsheets, desktop database files (such as Microsoft Access), multimedia/audio/video files (e.g., .wav, mpeg, .avi), and other comparable ESI that are not conducive to production in image format will be produced in Native Format, except where such files are image-redacted or slipsheets pursuant to the terms of this ESI Protocol. Responsive ESI produced in Native Format shall be produced with all Metadata contained in or associated with that file to the extent technologically possible consistent with Exhibit 1. Each ESI produced in Native Format shall be assigned a unique Bates number, and for each a single page placeholder TIFF image stamped with this unique Bates number, the phrase "PRODUCED IN NATIVE FORMAT", and the corresponding confidentiality designation under the Protective Order will be produced. No Party may attach to any pleading or any correspondence addressed to the Court, Special Master, or any adverse or third Party, or submit as an exhibit at a deposition or any other judicial proceeding, a copy of any produced native format document without ensuring that either the corresponding placeholder slip sheet is attached to the document or the corresponding Bates number and confidentiality legend, as designated by the Producing Party, appears on the document.

C. Production of ESI (both Native and Non-Native).

1. All responsive ESI, except that which is redacted, withheld as privileged, slipsheeted, or produced in Native format pursuant to the terms of this ESI Protocol, shall be produced as single page TIFF files with embedded text and images with corresponding extracted full text and affiliated Metadata as identified below. For documents whose Native Format is

multimedia/audio/video (e.g., .wav, mpeg, .avi), the original native files shall be produced in addition to a TIFF placeholder and fields of Metadata.

2. Each Party will use reasonable efforts to filter out common system files and application executable files. Non-user generated files defined by the NIST library (<http://www.nsrl.nist.gov/>) need not be produced. Additional culling of system files based on file extension may include, but are not limited to: WINNT, LOGS, DRVS, C++ Program File (c), C++ Builder 6 (cpp), Channel Definition Format (cdf), Creatures Object Sources (cos), Dictionary file (dic), Executable (exe), Hypertext Cascading Style Sheet (css), JavaScript Source Code (js), Label Pro Data File (IPD), Office Data File (NICK), Office Profile Settings (ops), Outlook Rules Wizard File (rwz), Scrap Object, System File (dll), temporary files (tmp), Windows Error Dump (dmp), Windows Media Player Skin Package (wmz), Windows NT/2000 Event View Log file (evt), Python Script files (.py, .pyc, .pud, .pyw), and Program Installers. Parties need not produce non-human readable E-Documents, except upon a showing of good cause by the Requesting Party.

D. Appearance and Content.

1. No document may be intentionally manipulated to change how the source document would have appeared if printed out to a printer attached to a computer viewing the file without prior agreement of the Requesting Party. Therefore, subject to any appropriate privilege or PII (Personal Identifiable Information, as defined by the U.S. Department of Labor) or PHI (Protected Health Information, as defined by HIPAA) redaction, each document's electronic image shall convey the same information and image as the original document. Responsive ESI that presents imaging or formatting problems shall be promptly identified and the Parties shall meet and confer in an attempt to resolve the problems. If a copy is not legible and the Requesting Party requests a

legible copy, the Producing Party shall provide a legible copy within a reasonable time following that request, or explain why a legible copy is not available.

E. Color.

1. If a document is being produced in non-native format, the Parties will accommodate a reasonable number of requests made in good faith for the production of a color image of specific documents originally produced in greyscale non-native format where the original document displayed such color and color is reasonably necessary to decipher the complete meaning, context, or content of the documents.

F. Near-native production.

1. If it is not practical to produce an item of responsive electronic information in Native Format per Section V.B., it may be produced in an agreed-upon near-native form. For example, output from databases may be produced as delimited text files or Microsoft Excel format. The Parties will meet and confer regarding any good-faith request for production of documents in a different format.

G. Non-English Documents.

1. To the extent that Documents are produced that contain languages other than English, in whole or in part, the Producing Party shall produce each such Document, along with its Metadata, in the original language or languages in which it was written and collected. Such Documents should be delivered with the correct encoding to enable the preservation of the Document's original language. If the Producing Party anticipates any custodian to possess potentially responsive foreign language documents, the Producing Party shall provide the Requesting Party with a proposed list of appropriate search terms in such languages.

H. Prior Production.

1. To the extent a response to a discovery request involves a Party providing a production set from a prior proceeding or litigation, such Party will produce the production set in the same format it was produced in the prior proceeding/litigation—except with the addition or substitution of Bates numbering and confidentiality designations specific to this litigation as described in Section V(D). The Producing Party may elect to provide appropriate Metadata fields, searchable text, organization and formats that were produced in that litigation (in place of the production requirements in this ESI Protocol) if it discloses any material differences from the current Protocol and obtains the Requesting Party's consent, which shall not be unreasonably withheld. The production in this litigation of materials produced in a prior litigation or administrative proceeding does not automatically relieve the Producing Party's obligation to search all necessary custodians, sources, and date ranges for documents responsive to discovery requests in this litigation. If the prior production materials cannot be re-produced with at least basic Metadata/objective coding (i.e., Document Date, Custodian, Author, Document Type) then the Parties shall meet and confer as to appropriate treatment of the reproduction within a reasonable time following such disclosure. This provision does not waive the right of a Party to object to any requests for reproduction of documents and ESI from such prior production.

2. If the Producing Party contends that any such prior production sufficiently identifies relevant, responsive documents for this Litigation it must identify how such prior production is responsive to the requests for production in this Litigation, including but not limited to: (i) custodians searched; (ii) custodial and non-custodial sources searched; (iii) keyword search terms and strings used; (iv) the date range searched.

2.1 If materials are being produced from a prior litigation or administrative proceeding, the Producing Party shall provide the specific litigation or proceeding in which each document was previously produced, as well as the entity who produced it. The prior production must be Bates stamped by the Producing Party in accordance with section V(D) of this ESI Protocol. If the prior production contained a Bates stamp, the Producing Party is under no obligation to retain those prior Bates stamps. It may elect to either Bates stamp the materials so that the underlying litigation's Bates number and the Bates number assigned in this Litigation by the Producing Party both appear on the face of the document, or it may elect to remove the prior Bates stamps.

I. Confidentiality of Produced ESI.

1. Responsive ESI, whether produced as TIFF images or in Native Format, shall be produced pursuant to the terms of the Stipulated Protective Order. Any objections to production shall otherwise be made pursuant to the Federal Rules of Civil Procedure or the Federal Rules of Evidence. If the Producing Party is producing ESI in TIFF Format subject to a claim that it is protected from disclosure under the Protective Order entered in this Litigation, any protective agreement or confidentiality order, or any agreement entered into or Order issued in this matter, the applicable designation for Protected Material shall be stamped electronically on each page of such document and the designation shall be included in a separate field in the .dat load file.

2. If the Producing Party is producing ESI in Native Format subject to a claim that it is protected from disclosure under any protective agreement or confidentiality order, or any agreement entered into or Order issued in this matter, then the designation shall be included in a separate field in the .dat load file, as well as the TIFF placeholder or where not produced with a TIFF placeholder, the storage device (e.g., CD, USB, or hard drive) containing such native ESI

data shall be labeled with the applicable designation for Protected Material pursuant to the Protective Order entered in this Litigation.

J. Production Specifications.

1. All productions will include these additional specifications:

1.1 Delimited image load/unitization file for images (.opt) shall be provided pursuant to Exhibit 2;

1.2 Delimited Metadata load file (.dat) containing a field with the full path and file name to the native files produced pursuant to Exhibit 2, and shall include the Metadata fields identified below (Exhibit 1);

1.3 Document level .txt files for all native documents containing extracted full text or OCR text (OCR only if extracted text is not available or if the document has been redacted);

1.4 Bates number branding and Confidentiality designation (if any) on the face of the image in a location that does not obliterate, conceal, or interfere with any information from the source document;

1.5 A TIFF placeholder embossed with the corresponding confidentiality designation and Bates number shall be produced for all ESI produced in Native Format;

1.6 Each Bates number will: (i) be unique across the entire document production; (ii) maintain a constant length across the entire production (i.e., ABC00000001- with no space between the prefix and the number, padded to the same number of characters); (iii) contain no special characters; and (iv) be sequential within a given document. If a Bates number or set of Bates numbers is skipped in a production, the Producing Party will so note in a cover letter or production log accompanying the production;

1.7 PowerPoint slides/presentations that are produced in TIFF format will be produced with any notes or comments contained therein; and

1.8 Each of the Metadata and coding fields set forth in Exhibit 1 shall be produced for a Document. The Parties are not obligated to populate manually any of the fields in Exhibit 1 if such fields cannot be reasonably extracted from a Document, with the exception of Default Production Fields (“DPF”) or “duplicate custodian” fields that are generated in the course of collection, review and production. If Metadata fields are not produced because they do not exist or because they are not reasonably accessible, the Producing Party shall include the fields in the header row of the .dat load file and leave the field blank for the corresponding document(s).

VI. PRIVILEGED MATERIALS

A. Privilege Logs

1. In the event the Producing Party withholds a Responsive Document or any Family Member of a Responsive Document on the basis of privilege, the Producing Party shall provide Privilege Log(s) in accordance with Federal Rule of Civil Procedure 26(b)(5) and any separate Privilege Order stipulated between the Parties and entered by this Court.

B. Production of Redacted Documents/Information.

1. **Redactions.** To the extent that a responsive document contains privileged content, or to comply with federal or state privacy requirements (*i.e.*, HIPAA), the Producing Party may produce that document in a redacted form. Documents may not be redacted on grounds other than privilege or to comply with federal or state privacy requirements, *i.e.* redactions for “responsiveness” are not permitted. Any such redactions for privilege or privacy shall be clearly indicated on each page of the document from which information is redacted, bearing a designation that it has been redacted. The designation shall make clear the reason for the redaction (*e.g.*,

“Redacted Privileged”; “Redacted PII”). Where a document contains both privileged and non-privileged responsive content, the Producing Party shall redact the privileged material and produce the remainder of the document as redacted.

2. Native Excel or other spreadsheet files that are redacted for privilege or privacy may be redacted within the Native file by overwriting the data contained in a particular cell, row, column or tab with the word “Redacted” and shall make clear the reason for the redaction (e.g., “Redacted Privilege”). If a privilege redaction impacts non-privileged cells/information, the Parties shall meet and confer to discuss. The Parties acknowledge that redacting the native may alter the Metadata of the produced file; however, the Metadata produced subject to Exhibit 1 will be the Metadata extracted from the original native file, other than Metadata containing redacted information.

3. Native Excels or other spreadsheet files that are redacted for privilege or privacy may be produced as black-and-white or color (as applicable), single-page TIFF files with OCREd text, with text and related path provided in document level text files, with load files pursuant to Exhibit 2, which shall include all information contained in the original file, including, but not limited to, speaker notes and “hidden” slides, with any redaction clearly delineated. If the file contains external video or audio components, the video or audio will be produced as native files.

VII. FAMILY RELATIONSHIPS OF ELECTRONIC FILES.

A. Family Relationships.

1. Document families (as defined above) must be preserved by assigning sequential Bates numbers to all files within a parent-child group (in accordance with section V(D) of this protocol), and by providing accurate attachment ranges for those files in the Metadata fields required. If a Party withholds as privileged any document or portion of a document, any parent-

child relationship must be similarly maintained by indicating the absence of that document or portion thereof using slip sheets containing unique Bates numbers. For example, if a Party withholds an attachment to an email as privileged, the parent email may be produced with a slip sheet in the place of the child stating that an attachment has been withheld as privileged.

2. Emails with attachments may be redacted if privileged but must be produced. For example non-privileged information in email headers must be produced even if the body of the email is redacted for privilege.

3. Where a document that is part of a family is withheld for privilege, and its relationship to the rest of that document family is indicated using slipsheets, the Producing Party shall provide one Bates-numbered slip sheet for each withheld document.

4. Where possible, the Producing Party shall provide updated Metadata associating the previously withheld document with its document family.

5. If a member of a document family that has otherwise been determined to be responsive cannot technically be processed (e.g., unsupported file format, file corruption, inaccessible password-protected document), those technical problems shall be identified and disclosed to the Requesting Party by production of a Bates-labeled slip sheet that states “Technical issue—file cannot be processed”; the associated Metadata for the file with the technical problem shall be produced if technically possible. A Requesting Party may thereafter raise with the Producing Party any questions or concerns, and the Parties shall meet and confer to attempt to resolve any issues.

B. Non-Responsive Attachments

1. An otherwise non-responsive attachment to a responsive parent document – or an otherwise non-responsive attachment to a parent document that has other responsive attachments

– may not be withheld simply because that particular attachment is deemed non-responsive. The Producing Party reserves the right to meet-and-confer with the Requesting Party about withholding specific non-responsive family members in the event that the production of such documents would cause the Producing Party a disproportionate amount of burden to produce irrelevant information. If the parties cannot agree, the Producing Party may seek relief from the Court.

C. Embedded Files.

1. Non-substantive automatically-generated embedded files, such as logos, embedded, non-substantive formatting files such as .ole or .dll formats, zero-byte files, widgets, or confidentiality legends need not be produced as separate attachments.

VIII. STRUCTURED DATA.

1. Structured data should be produced in a mutually agreeable data exchange format. The Parties will meet and confer to determine the potentially relevant databases at issue, including the data fields included in such databases.

IX. PRODUCTION MEDIA.

1. Documents shall be produced on external hard drive (with standard PC compatible interface), via secure FTP site, or such other readily accessible computer or electronic media as the Parties may hereafter agree upon (the “Production Media”). Each piece of Production Media shall include a unique identifying label and cover letter including the following information:

2. Name of the litigation and its case number;
3. Name of the Producing Party;
4. Date of the production (mm/dd/yyyy);
5. Bates number range;
6. Confidentiality Designation; and

7. Notes regarding any irregularities in the production (e.g., whether it is replacement Production Media (see below)).

8. Any replacement Production Media or Documents that replace productions made in this matter shall cross-reference the original Production Media, clearly identify that it is a replacement, and cross-reference the Bates number range that is being replaced. Producing Parties may encrypt their Production Media and, if so, shall provide a key to decrypt the Production Media in a separate communication.

X. OBJECTIONS TO ESI PRODUCTION.

1. If any formatting requirements or other specifications agreed to in this protocol are later determined by the Producing Party to be not feasible, or unduly burdensome or unreasonably costly, the Party, during the meet-and-confer process and prior to the time at which its written responses are due, shall: (i) describe the nature of the objection with reasonable particularity; (ii) provide the Requesting Party with the basis for declining to produce such ESI, including but not limited to the nature of any limitations on access, and an estimate of costs that might be incurred in producing such ESI; and (iii) indicate whether the Producing Party is willing to offer an alternative. The Parties shall negotiate in good faith concerning the production of any such ESI. If the Parties are unable to reach agreement, the Parties shall submit any dispute to the Court for resolution.

XI. COST SHIFTING.

A. The costs of production of ESI under this ESI Protocol shall be borne by the Producing Party, and the Parties agree that nothing in this ESI Protocol renders any costs or expenses of producing ESI “necessary” within the meaning of 28 U.S.C. § 1920.

B. If a Producing Party reasonably believes in good faith that producing particular ESI poses an undue burden or cost or is otherwise disproportionate, such Party, at or before the time the production is due under the Federal Rules of Civil Procedure, shall describe the nature of the objection with reasonable particularity and indicate whether it is willing to offer an alternative to production. The Parties shall promptly meet and confer in an attempt to resolve the issues and, if no resolution is reached, seek appropriate relief from the Court. In such case, the Court may apportion the costs of electronic discovery in accordance with and only as allowed by the Federal Rules of Civil Procedure; provided, however, that such apportionment shall not include the costs of producing documents in non-native format, as discussed above.

C. Nothing in this section or the remainder of this ESI Protocol precludes the Requesting Party from opposing any applications for shifting of costs.

D. By entering this ESI Protocol, a Party does not waive any objections it has to requests for documents. Nor does a Party give up its right to review its documents for privilege. The existence of this ESI Protocol cannot be used to compel a Party to produce documents without review.

IT IS SO ORDERED.

DATED: October 8, 2025

A handwritten signature in black ink, appearing to read "Young B. Kim", written in a cursive style.

Hon. Young B. Kim
United States Magistrate Judge

EXHIBIT 1**FIELDS and METADATA TO BE PRODUCED**

1. The load files accompanying scanned Hard Copy Documents will include the following objective coding fields, to the extent applicable:

Field	Field Description
CUSTODIAN (DPF)	The custodian of the document even if de-duplicated prior to production or location of item
BEGBATES (DPF)	First Bates number of item
ENDBATES (DPF)	Last Bates number of item
BEGATTACH (DPF)	Starting Bates number of a Document Family
ENDATTACH (DPF)	Ending Bates number of a Document Family
PAGECOUNT (DPF)	Number of pages
TEXTLINK (DPF)	Link to text file for the document

2. The following Metadata fields shall be included in Load files accompanying ESI, to the extent available, and/or unredacted and not privileged:

Field	Field Description for Electronic Documents	Field Description for Emails	Field Description for Calendar Entries
BEGBATES (DPF)	First Bates number of item	First Bates number of item	First Bates number of item
ENDBATES (DPF)	Last Bates number of item	Last Bates number of item	Last Bates number of item
BEGATTACH (DPF)	Starting Bates number of a Document Family	Starting Bates number of a Document Family	Starting Bates number of a Document Family

Field	Field Description for Electronic Documents	Field Description for Emails	Field Description for Calendar Entries
ENDATTACH (DPF)	Ending Bates number of a Document Family	Ending Bates number of a Document Family	Ending Bates number of a Document Family
PAGECOUNT (DPF)	Number of pages	Number of pages	Number of pages
ALL CUSTODIANS	All custodians of the document being produced even if de-duplicated prior to production. Where data is collected from an archive or non-custodial source, the archive or source shall be listed as custodian.	All custodians of the document even if de-duplicated prior to production. Where data is collected from an archive or non-custodial source, the archive or source shall be listed as custodian.	All custodians of the document even if de-duplicated prior to production. Where data is collected from an archive or non-custodial source, the archive or source shall be listed as custodian.
CONFIDENTIAL	Confidentiality designation, if any; otherwise blank.	Confidentiality designation, if any; otherwise blank.	Confidentiality designation, if any; otherwise blank.
AUTHOR	Document author from Metadata		
FROM		Sender of message	Sender of calendar invite
TO		Recipient(s) of message or calendar invite	Recipient(s) of calendar invite
CC		Copied recipient(s) of message or calendar invite	
BCC		Blind copied recipient(s) of message or calendar invite	

Field	Field Description for Electronic Documents	Field Description for Emails	Field Description for Calendar Entries
SUBJECT		Subject of message	Subject of calendar invite
SENTDATE		The sent date of the message in the format MM/DD/YYYY	Date calendar invite sent (if any) in the format MM/DD/YYYY
SENTTIME		The sent time of the message in the format HH:mm:ss	Time calendar invite sent (if any) in the format HH:mm:ss
RECEIVEDDATE		The received date of the message in the format MM/DD/YYYY	The received date of the invite in the format MM/DD/YYYY
RECEIVEDTIME		The received time of the message in the format HH:mm:ss	The received time of the invite in the format HH:mm:ss
FILENAME	Contents of this Metadata field, or an equivalent	Contents of this Metadata field, or an equivalent	Contents of this Metadata field, or an equivalent
FILEEXTEN	File extension	File extension	File extension
FILESIZE	Size of the file in bytes	Size of the file in bytes	Size of the file in bytes
HASH	MD5 or SHA1 hash of the document	MD5 or SHA1 hash of the email	MD5 or SHA1 hash of the calendar invite
ITEMTYPE	Identifies whether the file is an email, attachment, or stand-alone efile.	Identifies whether the file is an email, attachment, or stand-alone efile.	Identifies whether the file is an email, attachment, or stand-alone efile.

Field	Field Description for Electronic Documents	Field Description for Emails	Field Description for Calendar Entries
NATIVELINK (DPF)	Link to native file (if any)	Link to native file (if any)	Link to native file (if any)
TEXTLINK (DPF)	Link to text file for the document	Link to text file for the email	Link to text file for the calendar invite
TITLE	Title from a document's properties		
DATECREATED	Date file was created		
TIMECREATED	Time file was created		
DATEMODIFIED	Date file was last modified		
TIMEMODIFIED	Time file was last modified		
TRACKCHANGE	(Y/N) Field for documents with track changes		
FAMILYDATE	Populated for all documents. Document Families populated with parent date. MM/DD/YYYY	Populated for all documents. Document Families populated with parent date. MM/DD/YYYY	
PRODVOL	Production volume number	Production volume number	Production volume number
REDACTION	(Y/N) Field for documents with redactions	(Y/N) Field for documents with redactions	(Y/N) Field for documents with redactions

Such Metadata field values will be extracted from the native file and will be produced to the extent available at the time of collection and processing, except that they may be redacted if

privileged or if the Metadata field values contain information protected by law or Court Order. This list of fields does not create any obligation to create or manually code fields, except the duplicate custodian field, that are not automatically generated by the processing of ESI, that do not exist as part of the original metadata of the document, or that would be burdensome or costly to obtain.

EXHIBIT 2

REQUESTED LOAD FILE FORMAT FOR ESI

1. **Delimited Text File.** A delimited text file (.DAT File) containing the fields listed in Exhibit A should be provided. The delimiters for the file should be Concordance defaults:

- Comma – ASCII character 20 (¶)
- Quote – ASCII character 254 (p)
- Newline – ASCII character 174 (®)

2. **Image Cross-Reference File (.opt).** The Opticon cross-reference file is a comma delimited file consisting of six fields per line. There must be a line in the cross-reference file for every image in the database. The format for the file is as follows:

ImageID,VolumeLabel,ImageFilePath,DocumentBreak,FolderBreak,BoxBreak,PageCount.

ImageID: The unique designation that Concordance and Opticon use to identify an image. This should be the BegBates Number of the Document.

VolumeLabel: The name of the volume.

ImageFilePath: The full path to the image file.

DocumentBreak: If this field contains the letter “Y,” then this is the first page of a Document. If this field is blank, then this page is not the first page of a Document.

FolderBreak: Leave empty.

BoxBreak: Leave empty.

PageCount: Number of pages in the Document.

3. Sample Data

PROD00000001,VOL001,E:\100\ PROD00000001.TIF,Y,,2

PROD00000002, VOL001,E:\100\ MT00000002.TIF,,,,

PROD00000003, VOL001,E:\100\ MT00000003.TIF,Y,,,4

PROD00000004, VOL001,E:\100\ MT00000004.TIF,,,,

PROD00000005, VOL001,E:\100\ MT00000005.TIF,,,,

PROD00000006, VOL001,E:\100\ MT00000006.TIF,,,,